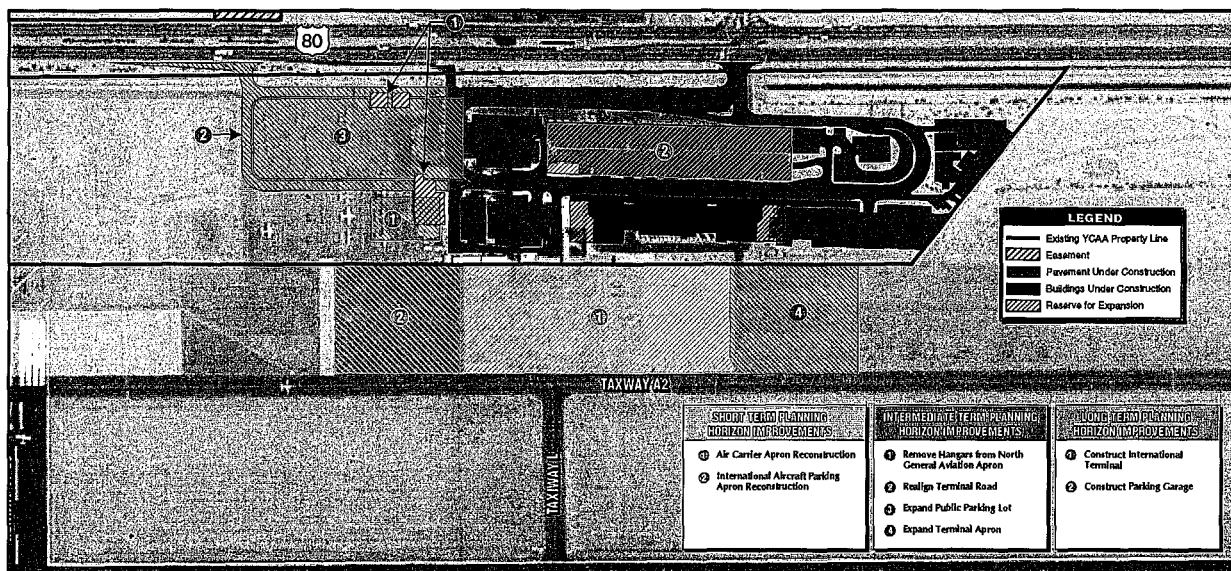




Chapter Six FINANCIAL PLAN

FINANCIAL PLAN



The successful implementation of the Yuma International Airport Master Plan will require sound judgement on the part of the Yuma County Airport Authority (YCAA). Among the more important factors influencing decisions to carry out a recommendation are timing and airport activity. Both of these factors should be used as references in plan implementation.

Experience has indicated that major problems can materialize from the standard format of some planning documents. These problems center around the plan's inflexibility and inherent inability to deal with new issues that develop from unforeseen changes that may occur after it is completed. The demand-based format used in the development of this master plan has attempted to deal with this issue.

While it is necessary for scheduling and budgeting purposes to consider the timing of airport development, the actual need for facilities is established by airport activity. Proper master planning implementation suggests the use of airport activity levels rather than time as guidance for development. Tracking airport activity levels and then comparing these to forecast activity levels and facility requirements provides decision-makers with the ability to anticipate and plan for when actual facilities are needed.

This chapter of the Master Plan is intended to become one of the primary references for decision-makers responsible for implementing the master plan recommendations. Consequently, the narrative and graphic presentations provide an understanding of each recommended development item. This

understanding will be critical in maintaining a realistic and cost-effective program that provides maximum benefit to the YCAA, State of Arizona, FAA, and airport users.

The presentation of the financial plan has been organized into two sections. First, the airport development schedule is presented in narrative and graphic form. Secondly, airport improvement funding sources on the federal, state, and local levels are identified and discussed. The Yuma County Airport Authority (YCAA) operating fund is also examined for its ability to contribute to future capital improvements.

AIRPORT DEVELOPMENT SCHEDULE AND COST SUMMARIES

The airport development schedule presented in this chapter outlines the costs for each recommended project and estimates when development should take place. The program outlined on the following pages has been evaluated from a variety of perspectives and represents the culmination of a comparative analysis of basic budget factors, demand, and priority assignments.

Since forecast demand and operational changes can change, frequently on short notice, the airport development schedule has been divided into planning horizons, reflecting short term (0-5 years), intermediate (6-10 years), and long term

(10-20 years) goals and needs. Planning horizons are intended to reflect the fact that many future improvements for the airport are demand-based, rather than time-based, and that the actual need to improve facilities will be linked to specific and verifiable activity. The airport development schedule should be viewed as a fluid document which can be modified to reflect actual growth in airport activity. The short-term planning period covers items of highest priority. Because of their priority, these are the only items scheduled year-by-year so as to be easily incorporated into local, State, and FAA programming.

Table 6A summarizes the airport development schedule for Yuma International Airport. In addition to the listing of actual improvement projects, an estimate has been made of the timing for implementation and federal and state funding eligibility for each airport improvement project as well as the local share costs for completing the recommended improvements. Due to the conceptual nature of a master plan, implementation of capital improvement projects should occur only after further refinement of their design and costs through engineering and/or architectural analyses. Capital costs in this chapter should be viewed only as estimates subject to further refinement during design. Nevertheless, these estimates are considered sufficient for performing the feasibility analyses in this chapter.

TABLE 6A				
Airport Development Schedule				
Description	Total Cost	Federally Eligible	ADOT Eligible	Local Share
Short Term Planning Horizon				
1999				
1 Air Carrier Apron Reconstruction	\$702,300	\$639,500	\$31,400	\$31,400
2 Land Acquisition (7 acres Along Pico Way)	367,500	334,600	16,400	16,500
3 Erosion Control	231,800	0	208,600	23,200
4 Pavement Preservation (Joint Repair Apron and Taxiways)	18,500	0	16,700	1,800
Subtotal	\$1,320,100	\$974,100	\$273,100	\$72,900
2000				
5 General Aviation Apron Reconstruction (North and West GA Aprons)	\$269,300	\$245,200	\$12,000	\$12,100
6 On-Airport Access Road Reconstruction (West GA Apron to Air Cargo Apron)	72,600	66,100	3,200	3,300
7 Acquire ADA Lift	50,000	45,500	2,200	2,300
8 Land Acquisition (120 ac. West of 4th Avenue)	3,625,000	3,300,900	162,000	162,100
9 Construct T-Hangar Access Taxilanes	292,000	265,900	13,100	13,000
10 Extend Utilities to T-Hangars	55,800	50,800	2,500	2,500
11 Construct Access & Auto Parking To T-Hangars	38,800	0	0	38,800
12 Construct 20 T-Hangars	500,000	0	0	500,000
13 Pavement Preservation (Seal Shoulders Air Cargo Apron)	4,800	0	4,300	500
Subtotal	\$4,908,400	\$3,974,400	\$199,300	\$734,600
2001				
14 Expand Air Cargo Apron (Phase I, 9,200 s.y.)	\$550,000	\$495,000	\$27,500	\$27,500
15 Extend Sanitary Sewer Service to Air Cargo Apron	71,000	63,900	3,600	3,500
16 Extend Water Service and Fire Protection Lines to Air Cargo Apron	307,000	276,300	15,400	15,300
17 Land Acquisition (17 ac. West of Fortuna Ave.)	700,000	0	630,000	70,000
18 Acquire Pavement Sweeper	120,000	109,300	5,400	5,300
19 Pavement Preservation (GA Aprons 3, 4, 5)	300,000	0	270,000	30,000
Subtotal	\$2,048,000	\$944,500	\$951,900	\$151,600
2002				
20 International Aircraft Parking Apron Reconstruction	\$275,000	\$247,500	\$13,800	\$13,700
21 General Aviation Apron Reconstruction (West GA Apron)	250,000	227,700	11,200	11,100
22 Land Acquisition (19.0 ac. West of Burch Way)	617,500	562,300	27,600	27,600
23 Pavement Preservation (Terminal Area Access Road)	65,000	0	58,500	6,500
24 Pavement Preservation (Access Rd Segments 1 & 2)	40,000	0	36,000	4,000
25 Pavement Preservation (GA Apron, # 2A, 2B, YCAA Hangar)	80,000	0	72,000	8,000
26 Pavement Preservation (Taxiway I, I-1, I-2, I-3)	30,000	0	27,000	3,000
27 Pavement Preservation (Non-Revenue Public Parking Lots)	200,000	0	180,000	20,000
Subtotal	\$1,557,500	\$1,037,500	\$426,100	\$93,900
2003				
28 Expand Air Cargo Apron (Phase II, 9,200 s.y.)	\$550,000	\$495,000	\$27,500	\$27,500
29 Land Acquisition (22.5 ac. West of Burch Way)	731,300	665,900	32,700	32,700
30 Extend Taxiway I to Runway 35 End	470,900	423,800	23,500	23,600
Subtotal	\$1,752,200	\$1,584,700	\$83,700	\$83,800
Total Short Term Planning Horizon	\$11,586,100	\$8,515,200	\$1,934,100	\$1,136,800

TABLE 6A (Continued)**Airport Development Schedule**

Description	Total Cost	Federally Eligible	ADOT Eligible	Local Share
Intermediate Term Planning Horizon				
31 Remove Hangars on North General Aviation Apron	\$62,400	\$56,800	\$2,800	\$2,800
32 Realign Terminal Entrance Road	101,200	0	0	101,200
33 Expand Public Parking Lot	231,600	0	0	231,600
34 Expand Air Carrier Apron (10,200 s.y.)	661,100	602,000	29,600	29,500
35 Install PAPI's to Runways 8, 26, 35	180,000	163,900	8,000	8,100
36 Install REIL's to Runways 8, 26, 17	180,000	163,900	8,000	8,100
37 Establish One-Mile GPS Approaches to Runways 8, 26, 35	0	0	0	0
38 Land Acquisition (8 acres North of 36th Street)	260,000	236,800	11,600	11,600
39 Land Acquisition (14 acres East of 4th Avenue)	637,000	580,100	28,500	28,400
40 Land Acquisition (40 acres West of 4th Avenue)	2,340,000	2,130,800	104,600	104,600
41 Land Acquisition (35 acres North of 40th Street)	1,137,500	1,035,800	50,800	50,900
42 Construct T-Hangar Access Taxilanes	155,200	141,300	6,900	7,000
43 Extend Utilities to T-Hangars	15,200	13,800	700	700
44 Construct 20 T-Hangars	500,000	0	0	500,000
45 Construct Access and Auto Parking To T-Hangars	21,800	0	0	21,800
46 Expand Air Cargo Apron (11,700 s.y.)	760,500	692,500	34,000	34,000
47 Construct Connecting Taxiway to Air Cargo Apron	1,100,000	1,001,700	49,200	49,100
48 Pavement Preservation	500,000	0	450,000	50,000
Total Intermediate Term Planning Horizon	\$8,843,500	\$6,819,400	\$784,700	\$1,239,400
Long Term Planning Horizon				
49 Construct Parallel Taxiway Y	\$11,100,000	\$10,107,700	\$496,200	\$496,100
50 Install MALSR to Runway 3L	250,000	227,700	11,200	11,100
51 Develop One-Half Mile GPS Approach to Runway 3L	0	0	0	0
52 Expand Air Cargo Apron (27,800 s.y.)	1,807,000	1,645,500	80,800	80,700
53 Construct International Terminal (10,000 s.f.)	2,300,000	1,150,000	575,000	575,000
54 Construct Parking Garage (450 spaces)	2,925,000	0	0	2,925,000
55 Construct T-Hangar Access Taxilanes	287,000	143,500	71,800	71,700
56 Extend Utilities to T-Hangars	35,500	32,300	1,600	1,600
57 Construct 30 T-Hangars	750,000	0	0	750,000
58 Construct Access and Auto Parking To T-Hangars	42,200	0	0	42,200
59 Land Acquisition (150 acres West of 4th Avenue to Avenue A)	2,925,000	1,462,500	731,300	731,200
60 Pavement Preservation	1,000,000	0	900,000	100,000
Total Long Term Planning Horizon	\$23,421,700	\$14,769,200	\$2,867,900	\$5,784,600
Total Airport Development	\$43,851,300	\$30,103,800	\$5,586,700	\$8,160,800

SHORT TERM PLANNING HORIZON IMPROVEMENTS

As indicated above, the short term planning horizon is the only development stage that is correlated to time. This is because development within this initial period is concentrated on the most immediate needs of the airport. Therefore, the program is

presented year-by-year to assist in capital improvement programming.

The short term planning horizon outlines the anticipated capital needs of the airport over the next five years (1999 to 2003). **Short term planning horizon improvements are estimated to cost approximately \$11.5 million** and include the following:

Pavement Preservation and Reconstruction: The short term planning horizon includes a number of projects intended to replace deteriorated portions of pavement and continue annual pavement maintenance. This includes reconstructing the air carrier apron, north and west general aviation aprons, on-airport access road, and international aircraft parking apron near the U.S. Customs facility. Annual pavement maintenance includes the application of slurry seals to rejuvenate pavement surfaces and smaller rehabilitation and reconstruction projects as needed.

Facility Development: The expansion of the air cargo apron, development of 20 T-hangars, and the extension of Taxiway I to the Runway 35 end are programmed for the short term planning horizon. The air cargo apron is planned to be doubled in size to accommodate forecast demand and provide for air cargo facility development. Primary sanitary sewer and water lines are planned to extend along the air cargo apron area. A 20-unit T-hangar is planned to accommodate forecast based aircraft demand and is planned to be developed at the south end of the west general aviation apron. The development of taxiways and automobile parking and access is programmed to proceed the development of the T-hangars. Extending Taxiway I to the Runway 35 end is intended to provide direct access between the runway and landside facilities. This serves to increase airfield capacity and safety by eliminating the need for aircraft to back-taxi along Runway 17-35 to access to the Runway 35 end.

Land Acquisition: The acquisition of approximately 185 acres of land is programmed for the short term planning horizon. Continued local economic growth and development are placing pressures on land adjacent to the airport to be developed for commercial, industrial, and even residential purposes. These property acquisitions are intended to provide areas for long term facility expansion and development and ensure long term land use compatibility.

Specifically, the land programmed for acquisition during the short term planning horizon includes a 7 acre parcel of land along Pico Way which will ultimately connect property under the control of the YCAA and provide for the development of a triangular parcel of land east of the Boeing aircraft certification facility; a 120 acre parcel of land west of 4th Avenue to Avenue A for long term facility development; a 17 acre parcel of land west of Fortuna for long term general aviation development, and 41 acres of land west of Burch Way for long term facility development.

Other Projects: The acquisition of a pavement sweeper and ADA lift are programmed for the short term planning horizon. The pavement sweeper will aid the YCAA in ensuring that aircraft operating areas are free of dirt and debris. The ADA lift will assist disabled airline passengers in entering and exiting aircraft. A project to grade and improve drainage in the area from the northwest general aviation hangars along Taxiway I in an effort to reduce erosion is also included in the short term planning horizon.

INTERMEDIATE PLANNING HORIZON

Intermediate planning horizon improvements continue pavement preservation and rehabilitation and T-hangar development. Additional projects include: expanding passenger terminal area parking, expanding the air carrier apron, installing PAPIs to the Runway 8, 26, and 35 ends to aid pilots in determining the correct glide path to these runway ends, installing REILs to the Runway 8, 26, and 17 ends to aid pilots in identifying the runway end at night and during low visibility conditions, expanding the air cargo apron, and acquiring approximately 97 acres of land for long term facility development. **Total intermediate planning horizon improvements are estimated to cost approximately \$8.8 million.**

LONG TERM PLANNING HORIZON

By the end of the long term planning horizon, the airport is expected to serve 362,000 annual passengers, have 185 based aircraft, and an annual traffic volume of nearly 84,000 civilian operations. Improvements over the long term planning horizon are designed to keep the airport in pace with projected passenger, based aircraft, and operational needs.

As the airport exceeds intermediate planning horizon operational milestones, it will be necessary to construct additional T-hangars, expand the air cargo apron, and construct a parking garage to serve public, rental

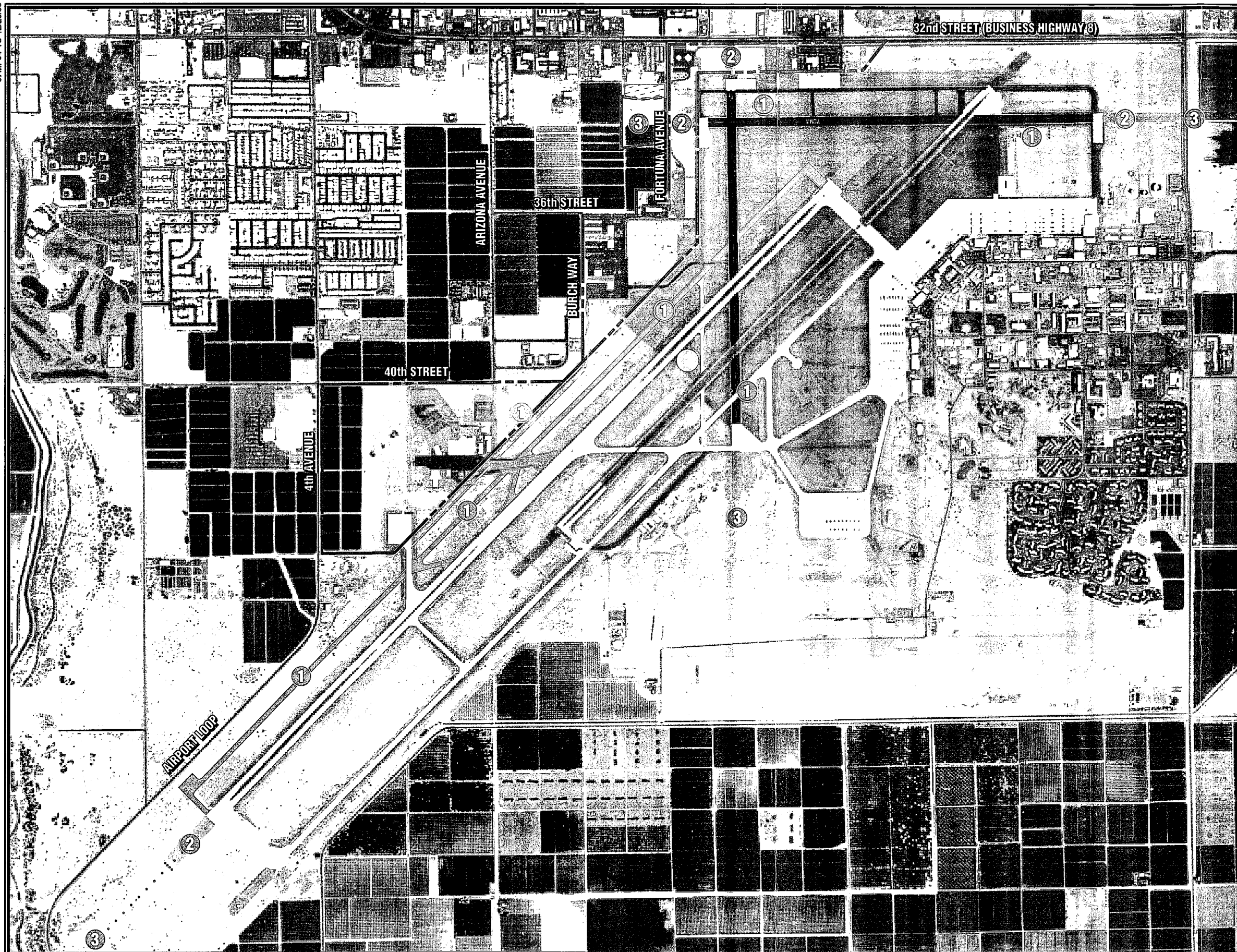
car, and terminal employee parking needs. The development of Taxiway Y north of Runway 3L-21R is anticipated to serve a growing number of civilian operations. Approximately 150 acres of land west of 4th Avenue is programmed for long term facility development. The long term planning horizon projects includes a provision for the development of an international terminal building west of the existing terminal and continues annual pavement maintenance and preservation projects. **Total long term planning horizon improvements are estimated to cost approximately \$23.4 million. Exhibits 6A, 6B, 6C, 6D, and 6E** provide a graphical depiction of recommended improvements through the planning period.

AIRPORT DEVELOPMENT AND FUNDING SOURCES

Financing future airport improvements will not rely exclusively upon the financial resources of the Yuma County Airport Authority. Airport improvement funding assistance is available through various grant-in-aid programs at both the state and federal levels. The following discussion outlines the key sources for airport improvement funding and how they can contribute to the successful implementation of this master plan.

FEDERAL AID TO AIRPORTS

The United States Congress has long recognized the need to develop and maintain a system of aviation facilities across the nation for national defense



LEGEND

- YCAA Property Line
- ▨ Aviation Easements

SHORT TERM PLANNING HORIZON IMPROVEMENTS

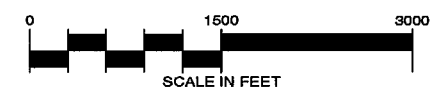
- ① On-airport Access Road Reconstruction
- ② Extend Taxiway I to Runway 35 End

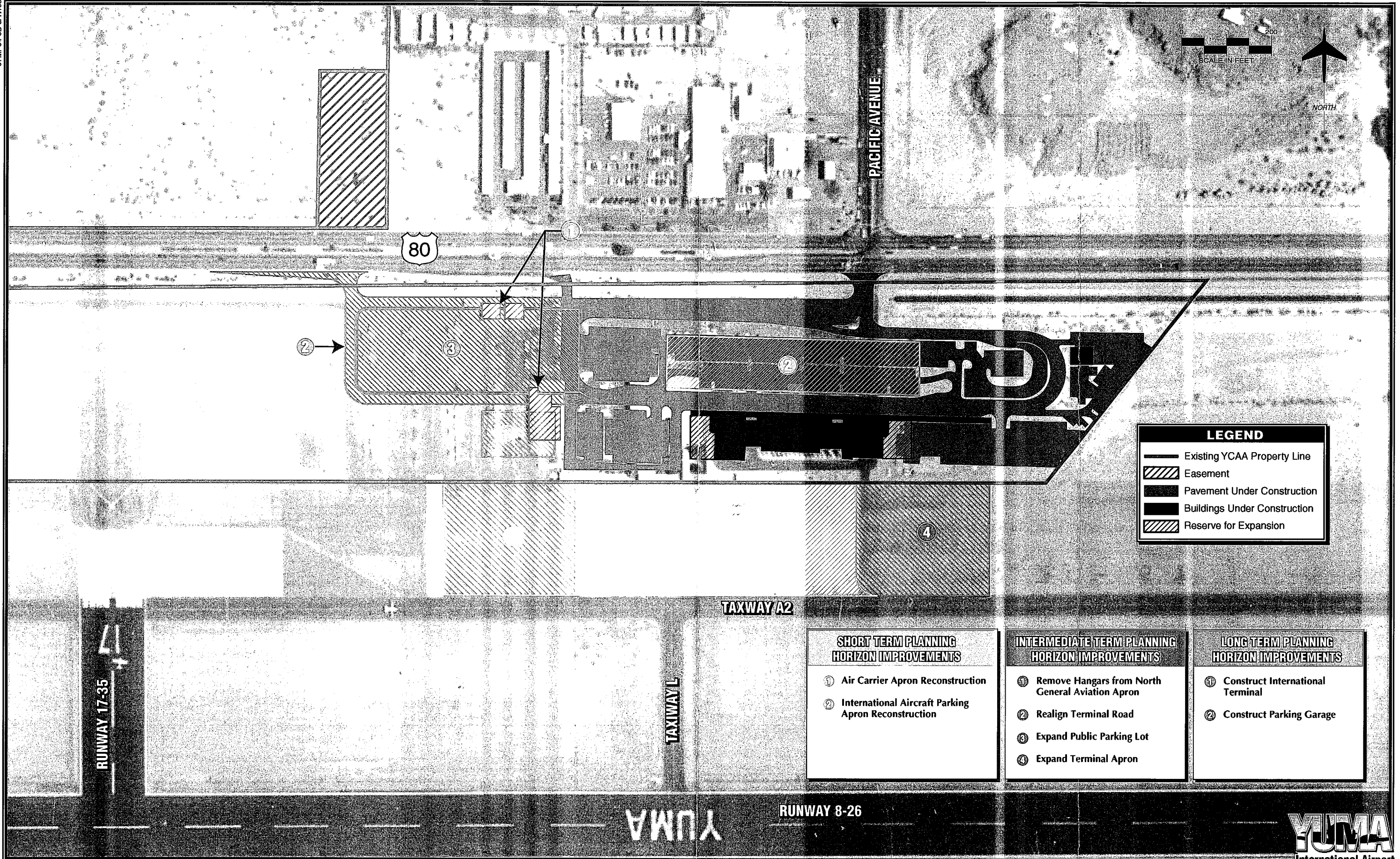
INTERMEDIATE TERM PLANNING HORIZON IMPROVEMENTS

- ① Install PAPI's to Runways 8, 26, 35
- ② Install REIL's to Runways 8, 26, 17
- ③ Establish GPS Approach to Runways 8, 26, 35

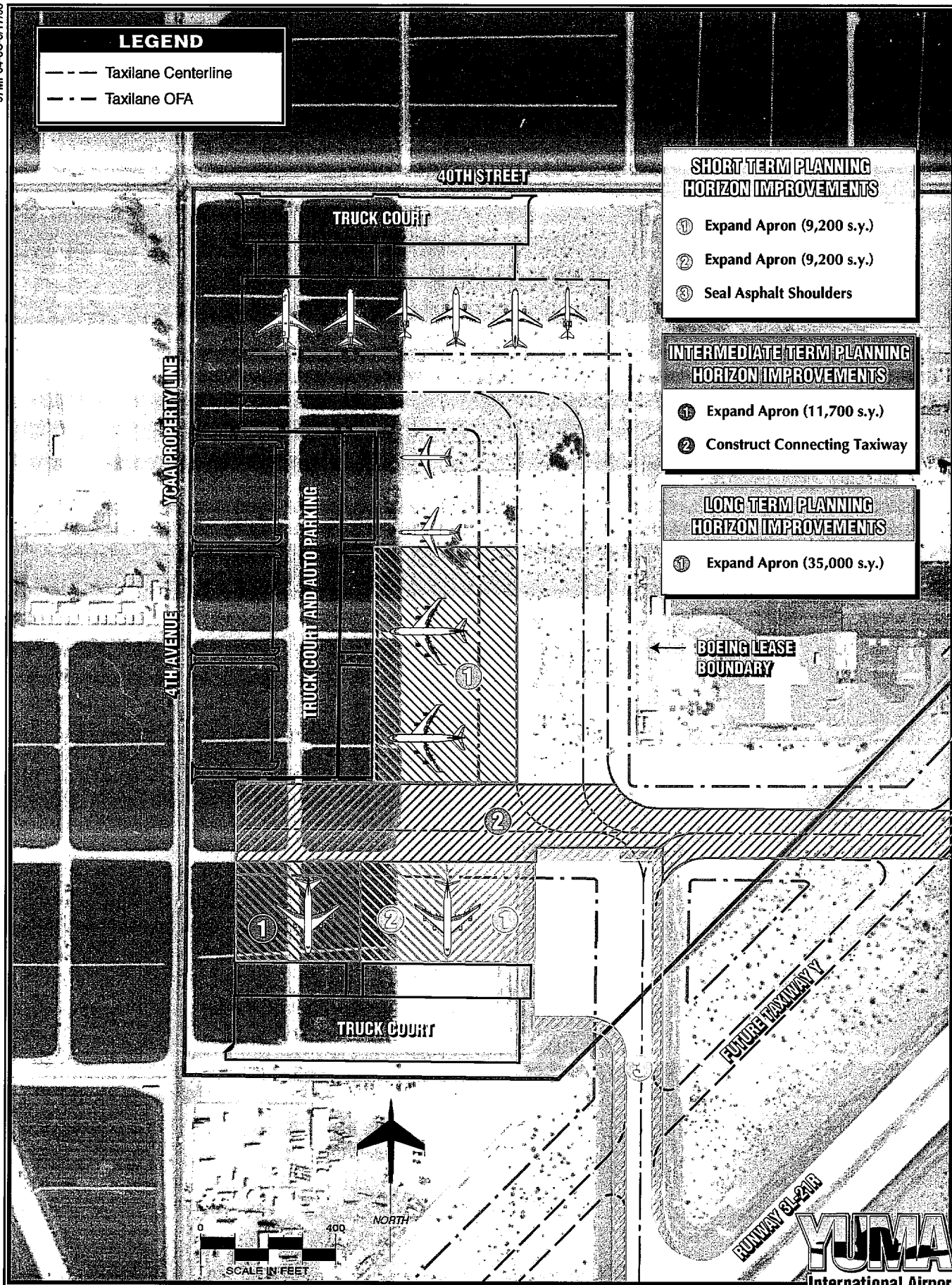
LONG TERM PLANNING HORIZON IMPROVEMENTS

- ① Construct Parallel Taxiway Y
- ② Install MALS R to Runway 3L
- ③ Establish GPS Approach to Runway 3L





YUMA
International Airport



SHORT TERM PLANNING HORIZON IMPROVEMENTS

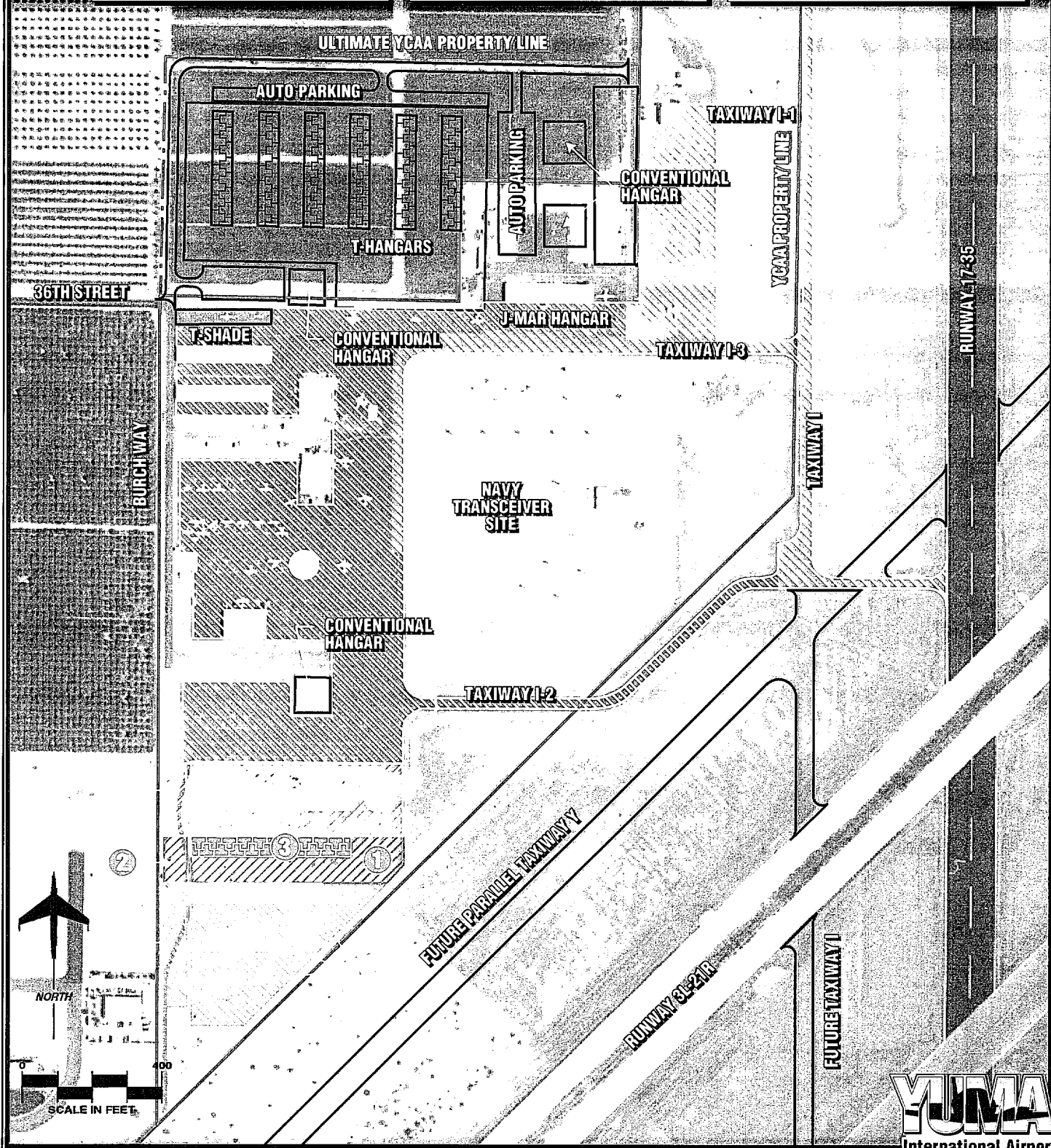
- ① Construct T-Hangar Taxilane Access
- ② Construct Access and Auto Parking
- ③ Construct 20 T-Hangars
- ④ Pavement Preservation and Reconstruction

INTERMEDIATE TERM PLANNING HORIZON IMPROVEMENTS

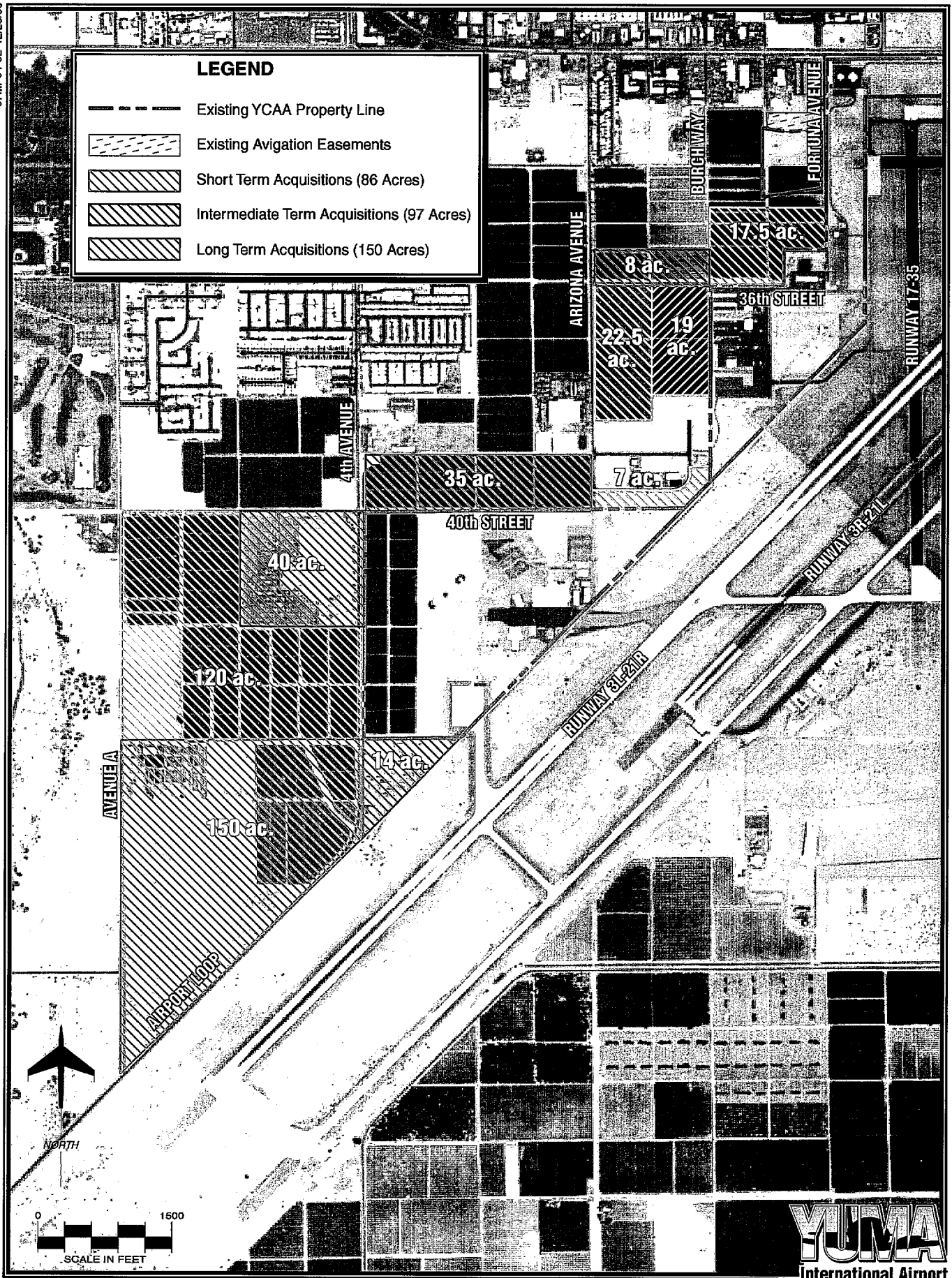
- ① Construct T-Hangar Taxilane Access
- ② Construct Access and Auto Parking
- ③ Construct 20 T-Hangars

LONG TERM PLANNING HORIZON IMPROVEMENTS

- ① Construct T-Hangar Taxilane Access
- ② Construct Access and Auto Parking
- ③ Construct 20 T-Hangars



YUMA
International Airport



and promotion of interstate commerce. Various grant-in-aid programs to public airports have been established over the years for this purpose. The current federal grant-in-aid program is the Airport Improvement Program (AIP). AIP has been reauthorized several times with the most recent reauthorization (the Federal Aviation Authorization Act of 1996) extending through federal fiscal year 1998. Funding was authorized at \$2.28 billion for fiscal year 1997 and at \$2.347 billion for fiscal year 1998. Unfortunately, the funding levels authorized in the legislation are not always the levels appropriated in the annual Congressional budget process. In fiscal year 1996, the AIP authorized level was \$2.161 billion, but only \$1.45 billion was appropriated. Only \$1.46 billion of the authorized \$2.28 billion was appropriated in 1997. For fiscal year 1998, \$1.7 billion of the authorized \$2.347 billion was appropriated.

The source for AIP funds is the Aviation Trust Fund. The Aviation Trust Fund was established in 1970 to provide funding for aviation capital investment programs (e.g., facilities and equipment, research and development, and grants for airport development and expansion projects). A majority of the FAA's operations account is financed through the Aviation Trust Fund. The Aviation Trust Fund is funded by federal user fees and taxes on airline tickets, aviation fuel, and various aircraft parts.

AIP Funds are distributed each year by the FAA under authorization from the United States Congress. A portion of each year's authorized level of AIP

funding is distributed to all eligible commercial service airports through an entitlement program that guarantees a minimum level of federal assistance each year. These dollars are calculated based upon enplanement and cargo service levels.

Passenger entitlement funding for commercial service airports is determined using the following formula. For the first 50,000 enplanements, the airport receives \$7.80 per enplanement. For the next 50,000 enplanements, the airport receives \$5.20 per enplanement. For the next 400,000 enplanements, the airport receives \$2.60 per enplanement. For all other enplanements over 500,000, the airport receives \$0.65 per enplanement. **Table 6A** projects the possible amount of entitlement funds available based upon forecast annual enplanements.

Cargo entitlements are based upon the total annual all-cargo aircraft landed weight at the airport. To be eligible for cargo entitlements, an airport must have over 100 million pounds of landed weight annually. The actual entitlement dollars are based upon the airport's percentage of the total landed weights of all eligible airports, with no airport receiving greater than 8 percent of the total annual cargo entitlement. For 1997, \$39,100,000 was authorized for cargo entitlements and 102 airports qualified for cargo entitlements ranging from \$39,908 to \$3,128,00. In general, an airport which is served by two Boeing 727-200 aircraft five days a week each year can qualify for a cargo entitlement.

TABLE 6A**Potential Entitlement and Passenger Facility Charges**

Year	Projected Annual Enplanements	Potential Annual Entitlement Fund	Potential Annual PFC's ¹
2000	91,000	\$549,000	\$265,000
2005	112,000	\$645,000	\$327,000
2010	133,000	\$708,000	\$388,000
2020	175,000	\$814,000	\$511,000

PFC - Passenger Facility Charge

¹ Assumes a maximum \$3.00 PFC

The remaining AIP funds are distributed by the FAA to airports based upon the priority of the project for which they have requested Federal assistance. A National Priority Ranking System is used to evaluate and rank each airport project. Those projects with the highest priority are given preference in funding.

Each airport project for Yuma International Airport not funded entirely through entitlement dollars must compete with other airport projects in the State for AIP State Apportionment dollars and across the country for other Federal AIP funds. An important point to consider is that, unlike entitlement dollars, the remaining federal funds are not guaranteed.

In Arizona, airport development projects that meet FAA's eligibility requirements receive 91.06 percent funding from the AIP. Eligible projects include any public use facility such as airfield and apron improvements. Revenue generating improvements such as fuel facilities and hangars are generally not eligible for AIP funding. FAA has historically not funded these types of facilities, but this

policy is currently under review by the agency to consider these improvements as eligible airport projects in the future.

PASSENGER FACILITY CHARGES

The Aviation Safety and Capacity Expansion Act of 1990 contained a provision for airports to levy passenger facility charges (PFC's) for the purposes of reducing noise impacts or enhancing competition, airport safety, security, or capacity. PFC's may be imposed by public agencies controlling a commercial service airport with at least 2,500 annual passengers and scheduled service. Authorized agencies may impose a charge of \$1.00, \$2.00, or \$3.00 per enplaned passenger.

Prior approval from the Department of Transportation (DOT) is required before an airport is allowed to levy a PFC. DOT must find that the projected revenues are needed for specific, approved projects. Any AIP-eligible project (development or planning) is eligible for PFC funding. Gates and related areas for the movement of

passengers and baggage are eligible as are on-airport ground access projects.

PFC's may be used only on approved projects. However, PFC's can be utilized to fund 100 percent of a project. They may be used as matching funds for AIP grants or to augment AIP-funded projects. PFC's can be used for debt service and financing costs of bonds for eligible airport development. These funds may also be commingled with general revenue for bond debt service. Before submitting a PFC application, the airport must give notice and an opportunity for consultation to airlines operating at the airport.

PFC's are treated similar to other airport improvement grants rather than as airport revenues, and will be administered by the FAA. Large and medium hub airports imposing a PFC are required to forego up to 50 percent of their AIP passenger entitlement. At small and non-hub airports, such as Yuma, the collection of PFC's can be almost wholly retained by the airport for use on approved projects. Participating airlines are able to retain up to eight cents per passenger for administrative handling purposes. **Table 6A** outlines the potential annual PFC funding that could be attained based upon forecast enplanements. Yuma International Airport currently imposes a \$3.00 PFC. Presently, the PFC revenues are dedicated to the bond payments for the construction of the new terminal building.

FAA FACILITIES AND EQUIPMENT PROGRAM

The Airway Facilities Division of the FAA administers the national Facilities and Equipment (F&E) Program. This annual program provides funding for the installation and maintenance of various navigational aids and equipment for the national airspace system and airports. Under the F&E program, funding is provided for FAA air traffic control towers, enroute navigational aids such as VOR's, and on-airport navigational aids such as PAPIs, and approach lighting systems. As activity levels and other development warrant, the airport may be considered by the FAA Airways Facilities Division for the installation and maintenance of navigational aids through the F&E program. Recommended improvements in this master plan which may be eligible for funding through the F&E program include the recommended REILs, PAPIs, and MALSR lighting aids. Should the Airway Facilities Division of the FAA install these navigational aids at the airport, they would be operated and maintained by the FAA at no expense to the airport.

STATE AID TO AIRPORTS

In support of the state airport system, the State of Arizona also participates in airport improvement projects. The source for State airport improvement funds is the Arizona Aviation Fund.

Taxes levied by the State on aviation fuel, flight property, aircraft registration tax, and registration fees, (as well as interest on these funds) are deposited in the Arizona Aviation Fund. The Transportation Board establishes the policies for distribution of these State funds.

Under the State of Arizona grant program, an airport can receive funding for one-half (4.47 percent) of the local share of projects receiving federal AIP funding. The State also provides 90 percent funding for projects, such as pavement maintenance, which are not eligible for AIP funding.

State Airport Loan Program

The Arizona Department of Transportation - Aeronautics Division (ADOT) Airport Loan Program was established to enhance the utilization of State funds and provide a flexible funding mechanism to assist airports in funding improvement projects. Eligible projects include runway, taxiway, and apron improvements; land acquisition, planning studies, and the preparation of plans and specifications for airport construction projects, as well as revenue generating improvements such as hangars and fuel storage facilities. Projects which are not currently eligible for the State Airport Loan Program are considered if the project would enhance the airport's ability to be financially self-sufficient.

There are three ways in which the loan funds can be used: Grant Advance, Matching Funds, or Revenue Generating Projects. The Grant

Advance loan funds are provided when the airport can demonstrate the ability to accelerate the development and construction of a multi-phase project. The project(s) must be compatible with the Airport Master Plan and be included in the ADOT 5-year Airport Development Program. The Matching Funds are provided to meet the local matching fund requirement for securing federal airport improvement grants or other federal or state grants. The Revenue Generating funds are provided for airport-related construction projects that are not eligible for funding under another program.

LOCAL FUNDING

The balance of project costs, after consideration has been given to grants, must be funded through local resources. There are several alternatives for local finance options for future development at the airport, including airport revenues, bonds, and leasehold financing.

There are several types of revenue bonds, but in general they are a form of municipal bond which is payable solely from the revenue derived from the operation of a facility that was constructed or acquired with the proceeds of the bonds. For example, a Lease Revenue Bond is secured with the income from a lease assigned to the repayment of the bonds. Revenue bonds have become a common form of financing airport improvements. The YCAA is financing the development of the new passenger terminal building, in part, through bonds.

Leasehold financing refers to a developer or tenant financing improvements under a long-term ground lease. The obvious advantage of such an arrangement is that it relieves the YCAA of all responsibility for raising the capital funds for improvements. However, the private development of facilities on a ground lease, particularly on property owned by a governmental agency, produces a unique set of problems. In particular, it is more difficult to obtain private financing as only the improvements and the right to continue the lease can be claimed in the event of a default. Ground leases normally provide for the reversion of improvements to the lessor at the end of the lease term, which reduces their potential value to a lender taking possession. A number of the existing general aviation facilities were developed privately under long-term lease arrangements with the YCAA.

Airport Operating Fund

The YCAA operating budget has been reviewed for its ability to contribute to future capital improvement funding. **Table 6B** summarizes historical revenues and expenditures for the airport from 1995 through 1997. This information was tabulated from YCAA financial records.

Land and building rentals provide the majority of revenue for the YCAA operating budget. As evidenced in the table, land and building rentals increased annually from 1995 to 1997. Landing fees are the second largest

revenue category. Landing fees are collected on commercial aircraft operating at the airport, including operations at the Boeing aircraft certification facility. Landing fees at Yuma International Airport are sensitive to airline schedules, certification operations at Boeing, and the number of charter passenger flights and cargo flights. The fluctuations in this category can be attributed to increases and decreases in any of these areas.

Fuel flowage fees, parking revenues, and miscellaneous revenues account for the remainder of the YCAA operating revenues. Fuel flowage fees are collected on aviation gas sold to the airlines, general aviation aircraft, and Boeing certification aircraft. Parking revenues are derived from fees for long and short term parking in the passenger terminal building parking lot. Miscellaneous revenues include such items as bad-debt recovery, finance charge income, interest income, and commissions.

Revenue projections were developed for the airport and are included in the Cash Flow Analysis. These projections were developed taking into account projected activity increases and additional facilities provided by the capital improvement program.

Operating expenses include personnel, maintenance, utilities, and administration. Personnel expenses comprise salaries, benefits, and uniform expenses. This is the largest expense

TABLE 6B			
Historical Operating Revenues and Expenditures			
	FY 1995	FY 1996	FY 1997
Operating Revenues			
Rentals	\$701,177	\$708,684	\$714,102
Fuel Flowage Fees	59,962	45,023	28,511
Landing Fees	160,172	227,307	116,967
Parking Revenues	44,825	27,155	31,975
Other Revenue	54,055	78,902	29,426
Total Operating Revenues	\$1,020,192	\$1,087,071	\$920,981
Operating Expenses			
Personnel	\$447,453	\$480,563	\$511,711
Maintenance	51,597	42,553	54,683
Utilities	106,708	108,155	110,134
Administration	262,126	333,274	203,637
Total Operating Expenses	\$867,884	\$964,545	\$880,165
Income (Loss)	\$152,308	\$122,526	\$40,815
Source: Yuma County Airport Authority			

category and has risen annually between 1995 and 1997. The maintenance expense category is a broad expense category which includes expenses related to buildings and grounds maintenance, vehicle fuel, oil, and maintenance, and other supplies and equipment necessary to carry out the day-to-day operations at the airport (including electrical and plumbing hardware, equipment rental, and safety equipment). The utilities expense category includes electric, water, and telephone charges. Utilities expenses increased annually from 1995 to 1997. The administration expense category is another broad expense category includes such items as contract labor (attorney fees, consultants, accounting and audit fees), office supplies, travel, membership dues, and advertising. This category fluctuated between 1995 and 1997. The large increase in 1996 can be attributed

to the development of the aircraft wash rack.

Operating expenses were projected after reviewing previous expense records. Adjustments were applied through the planning period to account for maintaining additional facilities as well as the aging of existing facilities. Inflation will affect future operating revenues and expenses but in order to maintain consistency with the Cash Flow Analysis, inflation factors have not been reflected.

Tables 6C and 6D present the summary of the Cash Flow Analysis for the planning period. The analysis is based upon revenues, expenditures, funding eligibility, and the remaining local share of capital improvement construction costs.

TABLE 6C					
Short Term Cash Flow Analysis					
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Operating Revenues					
Rentals	\$937,300	\$960,700	\$984,700	\$1,009,300	\$1,034,500
Fuel Flowage Fees	37,400	38,800	40,200	41,700	43,200
Landing Fees	121,700	124,100	126,600	129,100	131,700
Parking Revenues	32,300	33,300	34,300	35,300	36,400
Other Revenue	107,100	109,200	111,400	113,600	115,900
Total Operating Revenues	\$1,235,800	\$1,266,100	\$1,297,200	\$1,329,000	\$1,361,700
Operating Expenses					
Personnel	\$550,400	\$565,400	\$578,400	\$591,400	\$604,400
Maintenance	52,900	53,700	54,500	55,300	56,200
Utilities	105,000	106,700	108,400	110,100	111,900
Administration	154,800	156,400	158,000	159,600	161,200
Total Operating Expenses	\$863,100	\$882,200	\$899,300	\$916,400	\$933,700
Income (Loss)	\$372,700	\$383,900	\$397,900	\$412,600	\$428,000
Capital Improvement Funding					
Recommended CIP (-)	\$1,320,100	\$4,369,500	\$2,098,000	\$1,557,500	\$1,752,200
Potential Passenger Entitlements (+)	567,300	603,200	621,400	639,600	653,900
Potential Passenger Facility Charges	206,900	265,700	275,900	286,200	296,400
Potential ADOT Grants (+)	273,100	196,800	932,900	426,100	83,700
Potential FAA Grants (+)	406,800	3,320,400	0	397,900	930,800
Debt Service (-)	498,200	491,100	488,900	491,400	485,300
Local CIP Share	(\$364,200)	(\$474,500)	(\$706,700)	(\$299,100)	(\$272,700)
Annual Excess (Deficit)	\$8,500	(\$90,600)	(\$308,800)	\$113,500	\$155,300

As shown in the first portion of the Cash Flow Analysis (Operating Revenues and Operating Expenses), revenues are expected to increase through the planning period as passenger, cargo, and general aviation activity increases. The airport's cash flow will be enhanced through additional revenues generated

by air cargo facility development and hangar development in the general aviation area. As evident in the analysis, the YCAA operating fund is expected to continue to cover operating expenses and increase its operating income through the planning period.

TABLE 6D		
Extended Cash Flow Analysis - Annual Averages		
	Intermediate Term	Long Term
Operating Revenues		
Rentals	\$1,114,800	\$1,379,400
Fuel Flowage Fees	\$48,300	\$66,300
Landing Fees	\$139,800	\$165,700
Parking Revenues	\$39,800	\$51,400
Other Revenue	\$123,100	\$146,000
Total Operating Revenues	\$1,465,800	\$1,808,800
Operating Expenses		
Personnel	\$650,900	\$782,700
Maintenance	\$59,600	\$69,400
Utilities	\$117,400	\$134,500
Administration	\$166,000	\$179,600
Total Operating Expenses	\$993,900	\$1,166,200
Income (Loss)	\$471,900	\$642,600
Capital Improvement Funding		
Recommended CIP (-)	\$1,661,300	\$1,882,800
Potential Passenger Entitlements (+)	665,600	780,400
Potential Cargo Entitlements (+)	75,000	125,000
Potential Passenger Facility Charges (+)	335,200	438,500
Potential ADOT Grants (+)	156,800	238,900
Potential FAA Grants (+)	695,500	330,300
Debt Service (-)	431,900	339,500
Excess or (Deficit)	(\$165,100)	(\$309,200)
Annual Excess (Deficit)	\$306,800	\$333,400

The second portion of the Cash Flow Analysis examines the funding of the recommended capital improvement program. This portion of the analysis compares the annual improvement funding needs and debt service against capital improvement funding sources (operating income (loss), entitlement, PFC, and grant funding) to assess the ability of the YCAA to fund the local share of the improvements. Future T-hangar development was removed from the analysis as this is assumed to be funded through private resources.

As shown in the analysis, the YCAA should be capable of implementing the proposed improvements through the planning period, provided that each eligible project is funded fully with Federal and State grant funds and enplanement levels occur as forecast to ensure increased entitlement and PFC levels. Fiscal year 2000 may require the use of cash reserves and/or bonding to implement since capital needs may exceed projected capital funding levels and airport revenues.

The Cash Flow Analysis assumes that Federal and State funding will be available for eligible items. There is no guarantee of receiving adequate funding to the projects as scheduled. If adequate funding cannot be obtained, the choices will either be to finance the project through local resources (bonding, cash reserves) or to delay the implementation of the project. The YCAA will need to actively pursue Federal and State grant funding through the planning period to ensure the capital program can be implemented.

PLAN IMPLEMENTATION

The real value of a usable master plan is that it keeps the issues and objectives in the mind of the user so that he or she is better able to recognize change and its effect. In addition to adjustments in

aviation demand, decisions made as to when to undertake recommended improvements in this master plan will impact the period that the plan remains valid. The format used in this plan is intended to reduce the need for costly updates. Updating can be done by the user, improving the plan's effectiveness.

In summary, the planning process requires the YCAA to consistently monitor the progress of the airport in terms of total passengers, total aircraft operations, total based aircraft, and overall aviation activity. Analysis of aircraft demand is critical to the exact timing and need for new airport facilities. The information obtained from this continuous monitoring process will provide the data necessary to determine if the development schedule should be accelerated or decelerated.